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| **Halifax County Schools Elementary School Lesson Plan** | | | | | | | | |
| Subject: MATH | **Teacher:** | | | **Grade Level: Second Grade** | | **Date(s): September 12-16, 2016** | | |
| **Content :**  Common Core Standards & Essential Standards | **2.OA.1**. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.  **2.OA.2**. Fluently add and subtract within 20 using mental strategies.2 By end of Grade 2, know from memory all sums of two one-digit numbers.  **2NBT 1** Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones.  **2.NBT.2** Count within 1000; skip-count by 5’s, 10’s, and 100’s  **2.NBT.3** Read and write numbers to 1000 using base-ten numerals, number names, and expanded form. | | | | **Can Statements /Learning Targets** (I can……..)  I can add/subtract to solve one-step or two step word problems using drawings and/or equations  I can explain what strategy I used to solve my problem.  I can fluently add/subtract 1-digit numbers using mental strategies.  I can identify how many ones, tens, and/or hundreds are in a number.  I can skip count by fives/tens to 1000.  I can read and write numbers to 1000. | | | |
| Essential Question(s): (What question(s) should students be able to answer at the end of the lesson/unit?) | What strategy did you use to solve the word problems? Why does it work?  What strategy did you use to find the sum? differences? And why does it work?  How do you model place value in a variety of ways?  How do I represent numbers to 1,000 using a variety of models? | | | | **Standard for Mathematical Practice:**  **1. Makes sense and perseveres in solving problems.**  **2. Reasons abstractly and quantitatively.**  **3. Constructs viable arguments and critiques the reasoning of others.**  **4. Models with mathematics.**  5. Uses appropriate tools strategically.  **6. Attends to precision.**  7. Looks for and makes use of structure.  8. Looks for and expresses regularity in repeated reasoning. | | | |
| **Technology Connection:** <http://www.softschools.com/math/place_value/games/tens_and_ones/>  <http://www.ixl.com/math/grade-2/place-value-models-tens-and-ones>  <http://www.ixl.com/math/grade-2/place-value-models-up-to-hundreds>  <https://www.youtube.com/watch?v=4AF7xj7pmWc> - Video on expanded form  <https://www.youtube.com/watch?v=omkDLmfvetk> - Video on place value  <https://www.youtube.com/watch?v=uDSWMjtMff4> –Counting by Fives  <http://sciencepoems.net/video/onestenshundreds.aspx> Place Value Song | | | |
| **Vocabulary:**  Academic/Content | addition, subtraction, mental math, strategy, sum, difference, digit, doubles, near doubles, count-on, count-back, part, total, patterns, place value, models, expanded form, hundreds, tens, ones, bundle, digits, base ten, models, tens (longs), ones (cubes), hundreds (flats), expanded form, standard form, place value | | | | **Literature Connection:**  Sir Cumference and All the King's Tens: A Math Adventure by Cindy Neuschwander  A Place for Zero by Angeline Sparagna LoPresti  How Big Is A Million? by Anna Milbourne  Earth Day – Hooray by Stuart J. Murphy  Pigs Will Be Pigs by Amy Axelrod  Alexander, Who Used to be Rich Last Sunday by Judith Viorst | | | |
| **Materials Needed:** | * Hundreds Boards for each student * Transparent Counters | * Number words anchor charts * Three number cubes * Timers for math fluency | | | * Base 10 Blocks or patterns for students * Place Value Mats * Math fluency worksheets | | | * All About my Numbers recording sheet * Dry erase boards and markers |
| **Center Rotation Activities** | **Math with Teacher**  Use Math Mountains with up to 20 or 50 depending on the group. Have students explain thinking to the group. | **Math Fluency**  Partners will time each other in completing a math fluency worksheet on addition or subtraction. Students will record time on sheet and turn in. | | | **Technology**  [**http://members.learningplanet.com/act/count/free.asp**](http://members.learningplanet.com/act/count/free.asp) **-** Students will practice skip-counting by fives starting from different numbers. | | | **Writing About Math**  Which number is greater, 567 or 576? Use what you know about place value to explain your answer. |
| **Monday**  **Subject Integration:** | **Whole Group**  Complete quick skip-counting pre-assessment. Review skip-counting by 5s and 10s. Spiral Review: Now let’s look at reading bar graphs where we skip count by fives to find the answers: <http://www.harcourtschool.com/activity/lets_graph/>  Show counting by fives video referenced above: <https://www.youtube.com/watch?v=uDSWMjtMff4> Give each student a hundreds board. Have them skip count by fives and cover the numbers with a transparent counter as they say them. Put a number on the board. Instruct students to find 5 or 10 more. With 10 more, have them concentrate on identifying the pattern.    **Independent Work** Create a number recording sheet with a number in the middle and two blanks on each end. The students will have to use the hundreds board to write the numbers that are 10 more and 10 less.   |  |  |  | | --- | --- | --- | |  | **34** |  |   Monitor to see which students are using the discovered pattern to complete the recording sheet. Pull others in a small group for further instruction. | | | | | | **Assessment (formative/summative)**  Use anecdotal notes/observations for your formative assessments on who needs to be pulled for a guided math lesson on skip counting. | |
| **Tuesday**  **Subject Integration:** | **Whole Group**  ***Show and Tell Numbers***: Give each student a hundreds board. Have cards prepared with number words, numbers, base 10 blocks representations, and expanded forms of different numbers. Show students a card and have them find them on the hundreds board and cover with a transparent counter. Whatever form the number is shown in (words, base 10 blocks, numbers, expanded form), have student volunteers show the number in the alternate forms!  **Largest Number Game**: Give three volunteers a number cube. Each player takes turns rolling the cube and will write their number on the board. The team of three will decide what order their numbers should be in to create the largest number. The student audience will give them a thumbs up or a thumbs down to assess the team and explain why. The goal is to create the largest 3-digit number. Once the largest number is created, have the students read the number. Model for them how to write the number in words and in expanded form. Repeat with other student volunteers.  **Independent Work (Journal Prompt or Exit Ticket)**  Which number is greater, 435 or 453? Use what you know about place value to explain your answer. | | | | | | **Assessment (formative/summative)**  Use anecdotal notes/observations for your formative assessments on who needs to be pulled for a guided math lesson. | |
| **Wednesday**  **Subject Integration:** | **Whole Group**  Have a large place mat sheet (H/T/O) drawn on the white board or smart board. Re-introduce Base 10 Blocks to the students. Write a 3-digit number on your place mat sheet. Model using the units to make the number in the ones column. Remind the students of what happens to the unit when you count 10 of them (Group together to create a long) Next, model the number in the tens column with the longs. Gather 10 longs- count by 10s. What number did we get? 100. Remind the students that 10 longs make a flat. Model the number in the hundreds column with the flats. After the number is modeled, show it in expanded form. Model this several times. Give pairs of students a dry erase board, markers, and bag of base 10 block patterns. On the top of the dry erase board, have the students write the label – Expanded form. When the teacher writes a number on the board, one partner will create the number using base 10 blocks and the other will write the number in expanded form. On the next number, the pairs will alternate. | | | | | | **Assessment (formative/summative)**  **1 NBT Task 1a**  [**http://commoncoretasks.wikispaces.com/**](http://commoncoretasks.wikispaces.com/) | |
| **Thursday**  **Subject Integration:** | **Whole Group**  Write 706, 670, 760, and 607 on the board. Ask students to write about these four numbers on a sheet of paper - which of these numbers is largest? Which number is the smallest? Give students a few minutes to discuss their answers with a partner or a tablemate. Then, have students read aloud what they wrote on their papers, and to explain to the class how they figured out the larger or smaller numbers. Ask them to decide what two numbers are in the middle. After they have had a chance to discuss this question with a partner or with their table members, solicit answers from the class again. Model 706 and 670 on the board or on the overhead, and then have students draw 706 and other numbers with base 10 blocks or base 10 stamps. If neither of these materials are available, you can represent hundreds by using large squares, tens by drawing lines, and ones by drawing small squares. After you do 706 together, write the following numbers on the board and have students do them in order: 135, 318, 420, 864, 900. As the students write, draw, or stamp these on their papers, walk around the classroom to see how students are doing (make notes regarding which students need to be pulled for additional help on the skill. To close out the lesson, give every child a notecard with one numeral on it. Call three students to the front of the class. For example, 7, 3, and 2 come to the front of the class. Have the students stand next to each other, and have a volunteer "read" the threesome. (Students should say "Seven hundred thirty two".) Then ask students to tell you who is in the tens place, who is in the ones place, and who is in the hundreds place. Repeat as necessary. **Variation**: Tie in to Monday’s lesson by calling three volunteers and have them form the largest number they can. | | | | | | **Assessment (formative/summative)**  Use anecdotal notes/observations for your formative assessments on who needs to be pulled for a guided math lesson on place value. | |
| **Friday**  **Subject Integration:** | **Whole Group**  Use Smart Notebook lesson shared in HC 2nd Grade PLC folder entitled **3-4 digit Place Value** as a review lesson.  **Independent Work**  **Digit Switch-a-Roo! -** Advanced Preparation – Copy onto cardstock and cut out the digits 1-9 only to create the playing cards. Exclude the zeros at this time. You will need a set of playing cards for each pair of students.  Provide each pair of students with digit cards and each a sheet of paper to record their answers on. Have the students shuffle the digit cards and place the deck face down. Instruct them to select  three cards and turn them over to reveal the digits. Challenge the children to cooperatively create as many numbers as they can with the three digits chosen. They are to write the numbers down as they make them on the paper provided. Once they have created their lists, instruct them to write these numbers in order from the least to the greatest. | | | | | | **Assessment(formative/summative)**  **1 NBT Task 1f**  [**http://commoncoretasks.wikispaces.com/**](http://commoncoretasks.wikispaces.com/) | |
| **Reflection-Checking for Understanding**  Students in need of remediation:  Action/Activities: | | | **Reflection-Checking for Understanding**  Students on target:  Action/Activities: | | | | **Reflection-Checking for Understanding**  Students who need enrichment:  Action/Activities: | |